

What was to become the National Center for Experiments in Television was initiated as a one-year pilot program, 'Experimental Projects', proposed to the Rockefeller Foundation by KQED's first president and general manager, James Day, and his successor, Richard O. Moore. Brice Howard, the director of cultural programming at WNET in New York, was invited to take a leave of absence in order to helm the project and he accepted, arriving with a headful of ideas about what television, freed from the conventions of regular programming and at the service of personal expression by artists, might be capable of. He coined the terms 'videospace' and 'the videospace mix' to connote an original process that would consider the TV screen as a canvas upon which to shape electron flow.

Five artists from different disciplines – William Allen, painter and sculptor; William Brown, novelist; Richard Felciano, composer; Joanne Kyger, poet; and Loren Sears, filmmaker – were brought in beginning in August 1967 for this first year, and each was allotted two days to work in the KQED studios (the only equipment then available to them) with the assistance of station producer/director Robert Zagone. Nearly all of the work of the Experimental Projects program was made in black-and-white, a decision of Howard's because he felt 'if you move too fast into chromatics [...] you start to get soothed and mystified into thinking the things you're doing are much better than they are'.<sup>1</sup> Nevertheless, given these constraints, some remarkable pieces were the result of that first year, most notably Kyger's *Descartes* (1968)<sup>2</sup> and Felciano's *Linearity – A Television Piece for Harp and Live Electronics* (1968).<sup>3</sup>

On the basis of a report Howard wrote after the pilot program's completion that he later revised for his aesthetic 'manifesto' *Videospace* (1972a),<sup>4</sup> the Experimental Projects was redubbed the National Center for Experiments in Television and would continue through 1975. Beginning with Willard Rosenquist as artist-in-residence and Paul Kaufman as scholar-in-residence (and later codirector), a core group of additional artists would quickly begin to accrue, notably Stephen Beck, William Gwin, Don Hallock, Warner Jepson and William Roarty, along with Rosenquist and Felciano, most of them remaining for the duration and often working in collaboration. As the Center began to amass a ragtag collection of equipment of its own, ties to parent station KQED became increasingly tenuous. But as Howard believed from the outset that the core purpose of NCET was to give artists complete freedom without any consideration for broadcast demands, this divorce was in complete accord with his vision. The environment at the Center, the surviving artists recall, was very informal.

Many works of exceptional beauty and grace were produced at the Center during those years, tapes that developed with slow, meditative delicacy that have been referred to as ‘time paintings’. Very few were ever aired on TV, nor are they in distribution and, therefore, have rarely been seen, and many were, until recently, scattered and in dubious condition.<sup>5</sup>

But the Center was also actively engaged in tool and instrument development from the outset; the most significant of these efforts are described below.

### **Stephen Beck – Direct Video Synthesizer and Video Weaver**

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In 1971, a young electronics engineer from University of Illinois at Urbana, who had also been involved in the Electronic Music Studio there, traveled to the Center to show some films he had made using a tool of his own devise, a Direct Video Synthesizer (DV #0), that created moving color abstractions on a cathode ray tube using electronic waveform generators as input. Invited to join up, Beck spent the next several years refining his instrument through its next incarnation (DV #1), employing circuitry to create and manipulate color, form, motion and texture, and Beck’s many experiments and completed tapes evidence his increasing mastery over the machine. Moving from analog to digital technology, Beck next created his Video Weaver, so named because its highly geometric, interlacing patterns resembled nothing so much as the warp and woof created by the artisan’s loom, now electronically manifested.

Beck’s Direct tools were among the first – and best known – of what might be called ‘synthesizers’ proper, insofar as they generated images entirely by means of internal circuitry, as compared with those like the Paik/Abe that were predominantly ‘processors’ of camera-based images (although Beck’s machine could also make use of camera input), and were extremely important in defining new directions for artists to explore in video.

That being said, Beck’s tools had little impact upon the creation of works by others at the Center, because no one but their inventor was permitted to use them. Stephen’s rationale for his proprietary interest was pragmatic; after having hand-wired a vast number of circuit boards, he feared that an inexperienced user might inadvertently cause malfunctions that would require countless hours of diagnosis and repair. Additionally, there are no replicas of these machines – unlike those of Dan Sandin, Nam June Paik and Shuya Abe, and others – with which other artists might have experimented.

### **Lawrence Templeton – The Templeton Mixer**

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Despite the great and justified acclaim given to Beck’s synthesizers, it was a more modest tool that served the greater number of artists at the Center, and gave them access to imaging abilities previously unavailable.

Lawrence Templeton was an engineer at KQED when he took it upon himself to also serve as circuit designer and instrument builder at NCET, constructing in 1970 what would become the central tool at the Center. As described by Don Hallock:

The Templeton Mixer consisted of three modules: the colorizer, the keyer, and the mixer [...]. The keyer module samples the brightness range of a source image and can separate that source into eight distinct zones according to relative brightness [...]. Color, or other image sources, can then be inserted into each of these zones. [...] The colorizer module supplies four different variable color sources. Each joystick control selects color from the spectrum by swinging the stick around a circle. The degree of deviation from center controls color saturation, and the top knob can be rotated to control color brightness. [...] All the functions of each of these mixer modules can be preset, varied manually in real time, or changed by control voltages derived from a separate source – the Buchla Box audio synthesizer, for instance.<sup>6</sup>

And by William Roarty's account, The Templeton Mixer sought to expand the modes of conventional broadcast image processing and to make the controls for them directly accessible to artists in a flexible form that allowed for immediate response to developing concepts.<sup>7</sup>

The first version of the Mixer was roughly the size of an upright piano, but within several years Templeton had designed one of equal power that was extremely portable. The Templeton Mixer was the primary tool with which all the artists, except Beck, worked, whether on tape or in live performance. As of this writing, only one of the three built is still in existence and operating.

### **Don Hallock – The Videola**

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Don Hallock's Videola is a complex electro-optical instrument bearing some resemblance to a giant kaleidoscope capable of being viewed, in its large-scale format, by about a hundred audience members simultaneously.<sup>8</sup> By means of mirrored surfaces housed within an elaborate trapezoidal wooden frame, it transforms a flow of video images that may be prerecorded or performed live, from a monitor at its narrowest side, into large, free-floating, constantly evolving spheres of immense beauty. Mandala-like objects, these globes, when experienced, have been known to induce in viewers something on the order of meditative states of mind.

Given that this was one of the most significant examples of video installation of that period, the Videola – like so much of the Center's other work – remains all but unseen. It has only been publicly installed twice: the first time at the San Francisco Museum of Art in 1973 in its full-scale version; the second as a reconstructed version of smaller dimensions at the Berkeley Art Museum exhibition, 'Videospace', curated by Steven Seid

and Maria Troy, in 2000.<sup>9</sup> Sections of it remain in storage with no immediate plans for future presentation. (See Color Plate 15)

The National Center had occupied, by Don Hallock's calculations, seven different locations throughout its eight-year tenure, and the last of these was in Berkeley. A major reason for this final move was financial, as NCET was losing funding support by 1974. In its ultimate year, Paul Kaufman tried to take it in a different direction, reinventing NCET as a home for a humanities project. The last major production of the Center was a pilot for a projected public TV series, *Ecotopia*, adapted from Ernest Callenbach's environmental-utopian novel, but when that failed to come to fruition, NCET folded its tents.

It is sometimes said that the National Center was too insular to have much impact on the Bay Area community, let alone the national scene. This was never strictly the case, as other San Francisco artists like Skip Sweeney at times collaborated with those at the Center, and early participants who worked briefly at NCET included visual artists Bruce Nauman and Benedict Tatti, and poets Robert Creeley and Charles Olson. As regards its national impact, it is also important to remember that it did have a regular program where groups of other broadcasters and art school representatives were brought in for a working tour, out of which developed a number of satellite centers, most notably at Southern Methodist University created by David Dowe and Jerry Hunter, and at the Rhode Island School of Design by Bob Jungels.

And Howard's term 'videospace' has become part of the vocabulary of the field still in use today.

## References

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## Notes

1. Brice Howard, interview, August 1978.
2. Kyger's *Descartes and the Splendor Of: A Real Drama of Everyday Life* (1968) makes spectacular use of video feedback, as well as other available studio techniques. It is a six-part poetic interpretation of the philosophical dualism expounded in Descartes's *Discourse on Method*, interweaving the quotidian and exotic, accompanied by an original poem written by the poet especially for the tape. Kyger is the performer, representing housewife,

- mother-goddess, and other figures, including herself as poet. The complete text of her poem is available in Kyger (2002: 69–73) and Phillips (2008: 146–49).
3. Felciano has described *Linearity* as a work ‘in which the television’s extensive processing and memory capacities were employed. Incorporating instructions for cameramen and control room, the score is composed in two passes, the first of which lays cues for the second, which overlays it. The result can be broadcast but not performed on a concert stage’ ([http://www.fishcreekmusic.com/fcm\\_felciano.htm](http://www.fishcreekmusic.com/fcm_felciano.htm). Accessed November 5, 2008. Current website with similar information is [www.richardfelciano.com](http://www.richardfelciano.com).). To elaborate, the solo harpist performed Felciano’s composed score and, while viewing this first pass on a video monitor, played in relation to the cues provided (as did the recording and mixing crew, who also followed these instructions). As almost the entire work consists of close-ups of the musician’s hands, the strings of the instrument create linear visual patterns of their own.
  4. See also Howard 1972b.
  5. An ongoing attempt at preservation to rectify this matter has been undertaken by Steven Seid, Curator at the Pacific Film Archive at University of California, Berkeley beginning in 2000, when he mounted the exhibition ‘Videospace’ at the Berkeley Museum of Art to highlight the activities at NCET. I am also working to extend this effort of correcting and transferring to DVD additional works from those years.
  6. See <http://ncet.torosgallery.com/index.html> where further information can be found about this particular tool and other of the Center’s activities.
  7. In addition to Don Hallock for the above description, I am indebted to William Roarty for access to his unpublished master’s thesis, ‘Videographic Image and Process Explorations’ (1977), which provided a great deal of information about the Templeton Mixer, as well as Larry Templeton and Rick Davis for clarification about the Mixer’s specific architecture.
  8. The Videola might be more properly considered as an instrument than a tool, yet I find this distinction rather arbitrary, and in most cases the terms are interchangeable. With few exceptions, experimental video tools like synthesizers are, in fact, instruments when in the hands of artists.
  9. For a full description, see exhibition catalog (Seid and Troy 2000).